# DOCKET FILE COPY ORIGINAL

# NATIONAL CONFERENCE OF VOLUNTEER EXAMINER COORDINATORS 1020 BYRON LANE

ARLINGTON, TEXAS 76012-1826 Tel.: (817) 795-9594

March 1, 2003

Federal Communications Commission Office of the Secretary 445 12th Street, SW, Washington, DC 20554 RECEIVED & INSPECTED

MAR - 4 2004

FCC - MAILROOM

ATTN: (Ms) Marlene H. Dortch, Secretary

### **Letter of Transmittal**

Dear Ms Dortch,

The National Conference of Volunteer Examiner Coordinators (NCVEC) is enclosing an original and nine (9) copies of a Petition for Rulemaking proposing a new entry-level Communicator Class of license in the Amateur Service.

As suggested in your August 22, 2003, Public Notice (DA-03-2730), we are forwarding this Petition via Priority Mail to the above address.

Very truly yours,

NATIONAL CONFERENCE of VEC

FREDERICK O. MAIA, W5YI
Chairman, Rules Committee

Enclosure: Petition for Rulemaking,

Original and 9 copies

No of Copies rec'd List ABCDE

04 51

# Before the FEDERAL COMMUNICATION AS COMMISSION RECEIVED & INSPECTF()

	Washington, DC 20554	MAR - 1 2004
In the Matter of	) RM-	FCC - MAILROCM
Amendment of Amateur Radio Service Rules to Provide for a New Entry Level Amateur Radio Class.	) CORIO	SINAL

TO The Commission

#### PETITION FOR RULEMAKING

# TABLE OF CONTENTS

Parag	
INTRODUCTION AND EXECUTIVE SUMMARY	. 1
BACKGROUND	. 8
Inadequacies of the current Amateur Radio license structure	8
Amateur Radio has failed to attract adequate number of operators	11
Relevance of Amateur Radio in today's world	
PROPOSAL	17
Creation of a new entry level license	. 17
Basic framework of the new entry level license	
Examination requirements	
Reallocation of existing resources	
Adjustments to existing HF assignments	
License upgrades of existing licensees	
Minimal impact to I CC	
CONCI USION	31
APPENDIX A. Proposed new rules and changes to existing rules	- 22

#### I. INTRODUCTION AND EXECUTIVE SUMMARY

- 1 Action by the World Administrative Conference 2003<sup>1</sup> (WRC-2003) Agenda Item 1.7.1 Article 25 removed the international requirement for the demonstration of Morse Code proficiency, leaving the issue up to each national administration. These actions have triggered a number of petitions concerning various aspects of the Amateur Radio rules, and possible adjustments thereto.
- 2 The current U.S. Amateur Radio license system does not correlate particularly well with the actual needs of licensees and in fact may serve to discourage interested individuals from obtaining a license. Of particular concern is the loss of the former entry level license, known as the "Novice" class. The Novice license in particular was very successful in accomplishing its original purpose.
- 3 The attraction to Amateur Radio appears to have changed in recent years. Public service communications, including operation during time of public need, is growing as a primary interest area for new Amateur Radio licensees. The core technical attraction remains. Assembling and operating a modern Amateur Radio station is one of the best ways for a beginning engineer to obtain the hands on training and technical foundation that he or she will need.
- 4 There is a need to reestablish the concept of having an entry level license that allows access to Amateur Radio in a meaningful way, with enough privileges so that the new licensee can experience a reasonable cross section of all that Amateur Radio has to offer
- 5 Placing limitations on the new entry level license will make sure that the hazards involved with radio operations are kept within safe boundaries, and that the errors of learning are kept to manageable levels
- 6 The present Amateur Radio band plans and frequency allocations are in need of adjustment, particularly in the MF and HF spectrum (1.8 to 29.7 MHz). This is a logical time to consider the inadequacies of the present system and address those issues. Accomplishing the following suggested changes in the Amateur Radio regulations with the minimum possible impact on the FCC budget is a primary goal of this proposal
- 7 If the United States is to remain a technology leader, we must allow our youth to gain access to technical opportunities such as Amateur Radio, where they can develop skills that will serve all of us.

International Radio Regulation Article S25 5 §3 was revised to make the Morse code testing requirement a matter for each licensing administration to decide for itself. Effective July 5, 2003, Article S25 5 §3 (1) reads. "Administrations shall determine whether or not a person seeking a license to operate an amateur station shall demonstrate the ability to send and receive texts in Morse code signals."

#### II. BACKGROUND

#### A. Inadequacies of the current Amateur Radio license structure

- 8 The present system of Amateur Radio licensing in the U.S. is not well suited to the needs of those persons wishing to obtain a license. The present system is one based on a previous system that had 6 distinct levels or classes of license<sup>2</sup>, including a clearly defined entry level license with very limited privileges, several intermediate levels each with differing levels of privileges, and a top level license with all amateur privileges. A 7th category was the "Conditional" license, basically a General License except taken by mail. The current system is a makeshift patchwork caused by successive adjustments, including removal of the former entry level license entirely, and other modifications caused by "forcing" a 6 tier licensing structure into the present 3 tier arrangement. The current licenses are known as the Technician, General, and Extra Class, respectively<sup>3</sup> Each of these licenses are still basically the same in most respects as they were in the previous 6 level system. Also as an interesting point, under the original "modern" arrangement (beginning in the 1950s and continuing into the 1980s), the Technician and General Class licenses used identical written exams, and differed only as to the Morse code requirement, that being 5 WPM for Technician vs. 13 WPM for General. As of April 15, 2000, the present 3 tier system has been in place. Adjustments were made to include some of the former Novice Class question pool questions (Element 2) in the new Technician (Element 3) exam, and some of the former Advanced Class questions in the new Extra Class (Element 4)
- 19 The original intent of the Technician license was to provide access to Amateur frequencies at 50 MHz and higher. In the 1950s and 1960s this was a true experimenters territory, where little was known about techniques and methods, where propagation of signals was a mystery, and where there was very little in the way of "off the shelf" commercial equipment. Home built stations were the norm, and many advanced circuit designs and engineering accomplishments were the direct result of explorations by experimenters. Technician licensees were literally on the cutting edge of technology, and many of their discoveries remain important to us today. Technician licensees of this era were seldom operators as such, and used their licenses more for discovery than for casual conversation. It was much more important to understand the technical intricacies of why circuits worked (or failed to work) than it was to know about everyday operations.
- 10 The use of the Technician license as the "entry level" license, while at the same time retaining the required technical level for traditional uses by Technician license holders, represents an untenable compromise between diametrically opposed goals. Many of the operating permissions, such as full power (1500 Watts PEP) transmitters, use of microwave frequencies, and complex modulation techniques are inappropriate in many ways for today's beginning Amateur Radio operator.

The six license classes are Novice, Technician. Technician Plus, General, Advanced and Amateur Extra Class

See 47 CFR § 97 501. The three remaining license classes are. Technician, General and Amateur Extra Class

#### B. Amateur Radio has failed to attract adequate numbers of operators in recent years.

- unnecessarily limits the growth of Amateur radio in this country. The examination for the present entry level license (the Technician Class license) is substantially more complex than was the case for the Novice exam. While it is true that some individuals do not find this more rigorous exam a problem, many, if not most, newcomers to Amateur Radio are not formally trained in or familiar with the engineering skills implied by the present exam. The precise numbers of persons who are turned away by the complexities of the current Technician exam can never be known, but there is no question that they exist. The basic question seems to be: "Would Amateur Radio in our country be better off if these other potential applicants had obtained licenses or not?" Most respondents would indicate an affirmative response. Which then leads to an immediate follow up query of the form: "How can we modify the present system to attract as many qualified applicants as possible?"
- 12 The former Novice served well as an entry level license. This license offered limited access to the HF (below 30 MHz) spectrum, limited transmitter power levels, limited frequency agility, and one modulation type (Morse code). Initially, operation on the 145-147 MHz band using voice modulation was allowed, but this provision was later removed. The original Novice permit was a one-year, non-renewable license. The examination was 20 questions, and was based on literally 4 pages of question and answer type text. The "question pool" consisted of 42 sample questions, some of which were of multiple part format. No wiring diagrams or charts were included. Over the years, the allowable frequencies were adjusted, power limits were raised somewhat to be more in line with commercially available transmitters, variable frequency control was permitted, and so on. During this same time, the license term was extended from 1 to 2, to 5 years, and eventually made indefinitely renewable. The number of questions on the exam was raised to 25. Fundamentally, however, the Novice license was basically a Morse code only license with very few privileges.
- study guide with the present Technician Class study guide. Again, using the ARRL text, titled "Now You're Talking," the study materials for the current entry level license consist of 166 (that's one hundred and sixty six) pages of text, covering 10 subject areas, plus another 80 pages of pool questions and answers, plus several additional pages of appendix, including several charts and graphs, a glossary and more. That's more than 250 pages of information to be learned before attempting the exam. It's no wonder that potential applicants become discouraged. They are presented with study materials that are (on the surface) more than 60 times the complexity of the original Novice license, and a much larger exam. While some additional questions clearly are necessary because of the permitted modes and other privileges, much of the information is nether necessary nor appropriate for an inexperienced applicant.

"Now You're Talking," 5th ed., pub ARRL, 2003

Reference ARRL License manual, 57th edition, 1957, American Radio Relay League

#### C. Relevance of Amateur Radio in today's world?

- 14 The motivations for Amateur Radio participation has changed for many applicants in recent years. Many new applicants have listed public service communications, including operation during time of public need, as the primary reason for their interest. The technology of radio communications, while still of interest to many, is of secondary interest to these individuals. Modern communications technology and the availability of off-the-shelf products have shifted the focus of many beginning Amateur Radio enthusiasts away from the "nuts and bolts" of radio technology to the use of radio communications as a tool to accommodate a greater public need. In recent times, as we have seen increased awareness of threats to our national safety from both natural and man-made causes, the use of Amateur Radio as a tool to assist individuals and public agencies has become an integral part of many emergency response plans."
- others. While the previous section indicates that there are shifts in the attraction offered by Amateur Radio to many individuals, the core technical attraction also remains. There is no better place for a beginning engineer to experience the hands-on training and knowledge gain that assembling and operating a modern Amateur Radio station provides. Amateur Radio is still the place where cutting edge technology can be given real world tests, where exciting new techniques and concepts can be given a workout, and where all this can be accomplished within the limits of modest budgets and limited resources. Many engineers (of several disciplines) include early Amateur Radio activities and experimentation as key factors in their later professional accomplishments. Amateur Radio enthusiasts are justly famous for their ability to improve existing systems and improvise entirely new methods from apparently unrelated bits and pieces.
- 16 While it clearly is in the public interest to have persons such as these available when needed, there must still be a comprehensive system of examinations in use. The primary goal in preparing for and passing these exams is to make sure the licensee understands the "rules of the road," as they apply to Amateur Radio operations. The anticipated elimination of Morse code testing will remove one barrier to obtaining an Amateur Radio license. Offering a new entry level license will ease another. We must, however, ensure that the quality and professionalism of the "average" Amateur Radio operator is not lost in the process. We must take steps to ensure that these individuals will be attracted to Amateur Radio by regulations and privileges that are relevant to today's (and tomorrow's) interests, and that they are not alienated by obsolete and areane requirements and issues

5

New provisions are included in Article 25 urging administrations use Amateur stations to transmit emergency and disaster communications.

#### II. PROPOSAL

#### D. Creation of a new entry level license.

- 17 There is a need to reestablish the concept of having an entry level license that allows access to Amateur Radio in a meaningful way, with enough operating privileges so that the new licensee can experience a reasonable cross section of all that Amateur Radio has to offer, while at the same time providing limits and safeguards so that new operators are unlikely to be a danger to themselves, their families, or their neighbors. These limits should make sure that new licensees understand enough of the rules and operating practices that they do not cause harmful interference to other operators or services, and that they have the opportunity to gain in both technical and operating skills as their experience continues.
- 18 Placing certain technical limitations on licensees using the new entry level license will make sure that the physical hazards involved with radio operations are kept within safe boundaries. The existing entry level license, the "Technician Class," allows even a beginner access to full amateur power (currently 1500 Watts PEP output) and operating frequencies (VIII), UHF, and microwave) where definite health hazards are known to exist. While the present exam structure does include study and testing on these issues, we feel it is better to limit beginners to power levels and frequencies that are unlikely to cause problems. Some of the technical limitations we are proposing will also serve to lessen the chance that new licensees will themselves be injuried when exploring the inner workings of their equipment.

#### 19. Basic framework of the new entry level license:

- a Name Suggested name of license to be the "Communicator Class." The reason for the name change is to differentiate the new permit from its ancestors. There could be confusion if the Novice or Technician name is retained. Using a new name for the license will reduce this issue to the lowest possible level.
  - b Term of license 10 years, renewable
- c Sequential call signs. In the event the Commission feels that Communicator Class licenses should have some special way of being easily identified, calls from the currently unissued but allocated NA1AAA through NZ0ZZZ block could be utilized. Vanity call signs would not be available for Communicator Class licensees
- d Power limits. Limit transmitter output power levels to 100 watts on all trequencies below 24 MHz, and 50 watts on all frequencies above 24 MHz. This allows enough power for adequate communication under most circumstances, and matches the nominal power output of the largest number of commercially available transmitters and transceivers available as of this writing. The use of these suggested power levels also removes the necessity for RF safety evaluations, as the power levels are below the stated threshold values for the frequencies concerned.

See 47 CFR § 2 302 call signs NA1AAA through NZ0ZZZ (two letters, one digit, three letters) is allocated to the Amateur Service

- e Additional electrical limits. No transmitter or transceiver may incorporate a final amplifier stage that requires more than 30 volts DC for normal operation. The goal of this restriction is to prevent, as much as is possible, injury to inexperienced operators. All known current production Amateur Radio transmitters and transceivers, including kits, available as of this writing, operate using 28 volts or less for the final stage. While this restriction of necessity prevents use of some "legacy" or "vintage" equipment, it is not likely to be a serious impediment to assembling a station.
- f Additional technical limits. No transmitter or transceiver may be used unless it is of commercial manufacture, or built from a kit of commercial origin. The reason for this provision is to prevent, as much as possible, spurious emissions from units lacking proper engineering design. Again, we realize that this leaves out one of the traditions of Amateur Radio, namely that of building your own station from "scratch". However, we note that technically inclined persons are likely to upgrade fairly quickly to a General Class license, where this restriction, and that of the previous paragraph, is no longer an issue
- g Operating modes: Allowable emission types should include Morse code (CW), AM, SSB, and FM voice, Digital modes including RTTY, AMTOR, PACTOR (and variations), PSK31, packet, and CLOVER, plus slow and fast scan television. Prohibited modes would include spread spectrum, pulse, and multiplex emissions. Communicator licensees would be permitted to use normal repeater systems and orbiting satellite systems.
- h Operating frequencies HF operations using applicable modes in the appropriate sub-bands in the 80, 40, 15, and 10 meter bands. VHF/UHF operation in the entire range between 50 and 450 MHz, using appropriate modes as defined by existing band plans and the limitations of this section. Transmissions would not be permitted on bands not listed herein.
- Special considerations Communicator licensees would not be permitted to serve as a control operator for a repeater or remote base system. They would be similarly prohibited from being the trustee of a club license, and serving as a volunteer examiner.

#### 20. Examination requirements:

- a Communicator Class applicants must pass a 20 question multiple choice examination based on a new Element 2 pool generated by the existing Volunteer Examiner Question Pool Committee
- b Communicator Class applicants shall be required to obtain and read a copy of the current FCC Part 97 rules, and to have this information available at all times. The actual text is available from the internet at no charge, or could be made available in printed form for a nominal fee. Applicants must certify as part of the application process that they have obtained and read the material, that they understand it, that they have a permanent copy of same, and that they agree to abide by the regulations as they then exist.
  - c There will be no Morse code requirement attached to this examination
- d We recommend that a pamphlet or other publication be provided explaining how to find more information about Amateur Radio via the internet, and how to locate a person

that can be an "Elmer", or helper, who can provide assistance when needed. This information could be given to all successful applicants at the completion of their exam

#### E. Reallocation of existing resources

- 21 The present Amateur Radio band plans and frequency allocations are in need of adjustment, particularly in the MF and HF spectrum (1.8 to 29.7 MHz). The present system includes areas reserved for the now unavailable (as new) Novice license. Existing Novice licensees, while permitted to continue at that level, are steadily declining, their numbers having reached approximately 32,000, (less than 5% of currently licensed radio amateurs) as of the last available information. A better use of the HF Novice assignments would be to adjust the bands in such as way as to allow increased access by all licensees as well as those holding the proposed entry level license. Included in the proposal is a way to accomplish this adjustment with minimal impact on present day operators.
- 22 Suggested operating ranges for Communicator Class licensees. In each case, the assignments would conform to existing band plans, including emission limitations, observed by other  $\cup$  S. licensees when operating on those frequencies

#### a 80 Meters

- 1 3950 4000 KHz All applicable modes, including voice and image
- 2 3550 3675 KHz All applicable modes except voice or image.

#### b 40 Meters

- 1 7250 7300 KHz All applicable modes, including voice and image
- 2 7050 7150 KHz All applicable modes except for voice or image.

#### c 15 Meters

- 1 21350 21450 KHz All applicable modes, including voice and image
- 2 21050 21150 kHz All applicable modes, except for voice or image

#### d 10 meters

- 1 28300 28500 KHz All applicable modes, including voice and image
- 2. 29000 29700 KHz All applicable modes, including voice and image
- 3 28050 28150 KHz All applicable modes, except voice and image.

#### e Frequencies between 50 MHz and 450 MHz

All standard Amateur bands, all applicable modes, according to existing band plans

#### 23. Adjustments to existing HF assignments:

a 80 meters Adjust phone band lower edge down to 3675 KHz. Open 3675 KHz to 3750 KHz to Extra Class voice operation. Allow General Class voice down to 3750 KHz

- b 40 meters. Adjust phone band lower edge down to 7100 KHz Open 7100 KHz to 7150 KHz to Extra Class voice operation. Allow General Class voice down to 7150 KHz
- c 15 Meters. Adjust phone band lower edge down to 21150 KHz. Open 21150 KHz to 21200 KHz to Extra Class voice operation. Allow General Class voice down to 21200 KHz
  - d 10 meters No adjustments necessary for General or Extra Class licensees

## F. License upgrades of existing licensees.

- 24 We are recommending that all existing Novice licensees be upgraded to Communicator Class status when the new Communicator license becomes effective Existing Novice licensees will be issued a new license at time of renewal, indicating Communicator Class status, with the station call sign and other information unchanged. Persons whose license was upgraded in this way would be permitted to obtain a sequential call sign from the Communicator Class block at no charge.
- 25 We are recommending that all existing Technician and Tech Plus licensees be upgraded without examination to General Class status when the new Communicator license becomes effective Existing Technician licensees will be issued a new license at time of renewal, indicating General Class status, with the station call sign and other information unchanged. Persons whose license was upgraded in this way would be permitted to obtain a sequential call sign from the General Class (Group "C" 1-by-3 format) block at no charge.
- 26 We are recommending that all existing Advanced Class licensees be upgraded without examination to Extra Class status when the new Communicator license becomes effective. Existing Advanced Class licensees will be issued a new license at time of renewal, indicating Extra Class status, with the station call sign and other information unchanged. Persons whose license was upgraded in this way would be permitted to obtain a sequential call sign from the Extra Class block at no charge.
- 27 We recommend that the existing Novice and Technician Class licenses be permanently retired. As soon as the requirement for Morse testing is removed, there will be no effective difference between the Technician and General Class licenses, and no reason at all for retaining the Novice license once the new Communicator Class license is effective. We are also recommending that the Advanced class license be similarly retired.
- 28 Morse code requirements As stated in our previous petition, RM-10787, it is our position that all Morse testing be removed from the Amateur system. We are not suggesting in any way that Morse code (also known as CW) be prohibited, and in fact, we encourage those with an interest in this mode to become proficient in its use. We do not recommend that the Extra Class license include Morse testing in any form. We believe the need for demonstrating this skill has long since passed, and that those who choose to explore this mode will do so of their own free will. Morse testing appears to be a significant deterrent to many otherwise

qualified applicants, and therefore it should be permanently removed from all levels of Amateur Radio testing

## G. Minimal impact to FCC

- Accomplishing these suggested changes in the Amateur Radio regulations with the minimum possible impact on the FCC budget is a primary goal of this proposal. We feel that these changes can be accomplished within a reasonable time frame and at low cost by taking advantage of the present volunteer examiner program and the associated question pools, and creating the proposed new license using the framework now in place. The new license structure would consist of the new entry level license, which we are suggesting be named the "Communicator Class," elimination of the present Technician Class license, and retaining the present General and Extra Class licenses. We are suggesting that some elements of the Technician Class license would eventually be integrated into the General Class license, and other present Technician license topics be included in the new entry level license. Any new questions required will be generated as needed by the existing Question Pool Committee (QPC). Preparation of new exams and administration thereof will be handled by the existing Volunteer Examiner Coordinator (VEC) system, and individual Volunteer Examiners (VEs)
- 30 The impact to the FCC would be limited to changes in the appropriate sections of the current Part 97 rules as were necessary, including changing the names of the license classes. Because the proposal includes the concept of automatically adjusting the license class of several thousand present license holders, by way of automatic upgrades in many of these cases, some computer programming time and administrative effort will be required. However, once this initial activity has been accomplished, the ongoing impact of the proposed changes will be minimal. We do expect to see an increase overall in the number of license applications processed, and a corresponding increase in the number of licenses granted. The amount of this increase is difficult to predict, but since the processes involved are already largely automated, the impacts are expected to be manageable within the present system.

#### H. Conclusion

- 31 The removal of Morse Code testing is expected to result in a significant increase in the number of both new license applications and upgrades. This is a logical time to consider the inadequacies of the present system and address those issues as well. The natural evolutionary changes in the reasons that make Amateur Radio of interest to ordinary citizens is also a factor. The fact that Amateur Radio is a vital resource in time of public need has been demonstrated again and again, and this fact will apparently remain true for the foreseeable future. Logically, it is in the public interest to make the Amateur Radio Service accessible to as many citizens as possible, while at the same time retaining sufficient control over the system and its operators to ensure that orderly growth and respect for the Commission's (and international) rules are accomplished
- 32 While the United States (and the FCC) are not bound by the decisions of other administrations, it is apparent that the world wide trend toward elimination of Morse Code testing and the use of HF by beginners will continue. If the United States is to remain a

technology leader, we must allow our youth to gain access to technical opportunities such as Amateur Radio, where they can develop skills that will serve all of us.

33. Therefore, the NCVEC, the National Conference of Volunteer Examiner Coordinators, respectfully requests that the Commission issue a Notice of Proposed Rule Making at any early date, proposing the rule changes set forth herein, and in the appendix attached hereto

Respectfully submitted. NCVEC, National Conference of VECs 1020 Byron Lane, Arlington, TX 76012-1826 Tel. (817) 795-9594

Thomas K. Fusgard

Thomas R. Fuszard, KF9PU, Chairman,

National Conference of Volunteer Examiner Coordinators

March 1, 2004

#### APPENDIX A

#### PROPOSED RULES

The proposed changes to Part 97 of Chapter I of Title 47 of the Code of Federal Regulations are included in this appendix

#### PART 97 -- AMATEUR RADIO SERVICE

#### Section 97.5(b)(2) of the Commission's Rules would be modified to read as follows:

§97.5 Station license grant required

101

- (b) The types of station license grants are
- (1)
- (2) A club station license grant A club station license grant may be held only by the person who is the license trustee designated by an officer of the club. The trustee must be a person who holds an Amateur Extra Class or General Class operator license grant. The club must be composed of at least four persons and must have a name, a document of organization, management, and a primary purpose devoted to amateur service activities consistent with this part.

\*\*\*\*

#### Section 97.9 would be modified to read as follows:

§97 9 Operator license

- (a) The classes of amateur operator license grants are: Communicator, General, and Amateur Extra. Those licensees holding a valid and unexpired (or expired but within the grace period) license of Novice Class will be converted to Communicator Class. Those licensees holding a valid and unexpired (or expired but within the grace period) license of Technician or Technician Plus class on [effective date] will be converted to General Class. Those licensees holding a valid and unexpired (or expired within the grace period) license of Advanced Class on [effective date] will be converted to Amateur Extra Class. The person named in the operator license grant is authorized to be the control operator of an amateur station with the privileges authorized to the operator class specified on the license grant.
- (b) The person named in an operator license grant of Communicator Class or General Class, who has properly submitted to the administering VEs a FCC Form 605 document requesting examination for an operator license grant of a higher class, and who holds a CSCE indicating that the person has completed the necessary examinations within the previous 365 days, is authorized

to exercise the rights and privileges of the higher operator class until final disposition of the application or until 365 days following the passing of the examination, whichever comes first

#### Section 97.17(a) would be modified to read as follows:

§97-17 Application for new license grant

(a) Any qualified person is eligible to apply for a new operator/primary station license grant. A person holding a General Class or Extra Class license may apply for a club station or military recreation station license grant. No new license grant will be issued for a Technician, Technician Plus, or Advanced Class operator/primary station, or for a RACES station

#### Section 97.19(a) would be modified to read as follows:

§97.19 Application for a vanity call sign.

(a) A person holding a General Class or Amateur Extra Class operator/primary station license giant or a club station license grant is eligible to make application for modification of the license grant, or the renewal thereof, to show a call sign selected by the vanity call sign system. RACES and military recreation stations are not eligible for a vanity call sign

#### Section 97.21(a)(3) would be modified to read as follows:

§97.21 Application for a modified or renewed license.

(a) A person holding a valid amateur station license grant

(1)

(2)

(3) May apply to the ECC for renewal of the license grant for another term in accordance with §1.913 of this chapter

(1)

#### Section 97.109(d) would be modified to read as follows:

§97 109 Station control

(a)

(d) When a station is being automatically controlled, the control operator need not be at the control point. Only stations specifically designated elsewhere in this Part may be automatically controlled. Automatic control must cease upon notification by an EIC that the station is transmitting improperly or causing harmful interference to other stations. Automatic control must

not be resumed without prior approval of the EIC. A station licensee holding a Communicator Class license may not be the control operator of an automatically controlled station.

\*\*\*\*

#### Section 97.119(f) would be modified to read as follows:

\$97 119 Station identification

(a)

- (f) When the control operator who is exercising the rights and privileges authorized by §97.9(b) of this Part, an indicator must be included after the call sign as follows:
- (1) For a control operator who has requested a license modification from Communicator Class to General Class. AG.
- (2) For a control operator who has requested a license modification from Communicator Class or General Class operator to Amateur Extra Class. AE

\*\*\*\*

#### Section 97.201(a) would be modified to read as follows:

§97 201 Auxiliary station

(a) Any amateur station licensed to a holder of a General Class or Amateur Extra Class operator license may be an auxiliary station. A holder of a General Class or Amateur Extra Class operator license may be the control operator of an auxiliary station, subject to the privileges of the class of operator license held.

\*\*\*\*

#### Section 97.203(a) would be modified to read as follows:

§97 203 Beacon station.

(a) Any amateur station licensed to a holder of a General Class or Amateur Extra Class operator license may be a beacon. A holder of a General Class or Amateur Extra Class operator license may be the control operator of a beacon, subject to the privileges of the class of operator license held.

\*\*\*\*

## Section 97.205(a) would be modified to read as follows:

§97 205 Repeater stations (a) Any amateur station licensed to a holder of a General Class or Amateur Extra Class operator license may be a repeater. A holder of a General Class or Amateur I xtra Class operator license may be the control operator of a repeater, subject to the privileges of the class of operator license held

\*\*\*\*

#### Section 97.207(a) would be modified to read as follows:

§97.207 Space station

(a) Any amateur station may be a space station. A holder of a Communicator Class, General Class or Amateur Extra Class operator license may be the control operator of a locally controlled space station, subject to the privileges of the class of operator license held by the control operator of a General Class or Amateur Extra Class operator license may be the control operator of a space station which is not locally controlled, subject to the privileges of the class of operator license held by the control operator.

\*\*\*\*

#### Section 97.301 would be modified to read as follows:

§97 301 Authorized frequency bands

The following transmitting frequency bands are available to an amateur station located within 50 km of the Earth's surface, within the specified ITU Region, and outside any area where the amateur service is regulated by any authority other than the FCC.

(a) For a station having a control operator who has been granted a General Class or Amateur Extra Class operator license or who holds a CEPT radio-amateur license or IARP of any class:

Wavelength	ITU	ΙſU	ITU	Sharing
band	Region 1	Region 2	Region 3	requirements
				See §97 303.
				Paragraph
VHI	MHz	MHz	MH∠	
6 m	-	50-54	50-54	(a)
2 m	144-146	144-148	144-148	(a)
L 25 m	-	219-220	-	(a), (e)
-do-	-	222-225	-	(a)
UHI	MHz	MHz	MHz	
70 cm	430-440	420-450	420-450	(a), (b), (f)
33 cm	-	902-928	-	(a), (b), (g)
23 cm	1240-1300	1240-1300	1240-1300	(h), (i)
13 cm	2300-2310	2300-2310	2300-2310	(a), (b), (j)
-do-	2390-2450	2390-2450	2390-2450	(a), (b). (j)
SHI	GHz	GHz	Glız	( // ( / 0/
9 cm	-	3 3-3 5	3 3-3 5	(a), (b), (k), (l)
5 cm	5 650-5 850	5 650-5 925	5 650-5 850	(a), (b), (m)
3 cm	10 00-10 50	10 00-10 50	10 00-10 50	(b), (c), (1), (n)

J.2 cm	24 00-24 25	24 00-24 25	24 00-24 25	(a), (b), (h), (o)
LHI	GHz	GHz	GHz	
6 mm	47 0-47 2	47 0-47 2	47 0-47 2	
4 mm	75.5-81 0	75 5-81 0	75 5-81 0	(b), (c), (h)
2.5 mm	119 98-120 02	119 98-120 02	119 98-120 02	(k), (p)
2 mm	142-149	142-149	142-149	(b), (c), (h), (k)
Limm	241-250	241-250	241-250	(b), (c), (h), (q)
-	above 300	above 300	above 300	(k)

(b) For a station having a control operator who has been granted an Amateur Extra Class operator license or who holds a CEPT radio-amateur license or Class 1 IARP.

Wavelength	HU	ITU	ITU	Sharing
band	Region I	Region 2	Region 3	requirements See §97 303, Paragraph
MI	ĥНz	kHz	kHz	3 "
160 m	1810-1850	1800-2000	1800-2000	(a), (b), (c)
HE	MHz	MHz	MHz	
80 m	3 50-3 675	3 50-3 675	3 50-3 675	(a)
75 m	3 675-3 80	3 675-4.00	3 675-3 90	(a)
40 m	7 0- <b>7</b> I	7 0-7 3	7 0-7 1	(a)
30 m	10 10-10 15	10 10-10 15	10 10-10 15	(d)
20 m	14 00-14 35	14 00-14 35	14 00-14 35	
17 m	18 068-18 168	18 068-18 168	18 068-18 168	
15 m	21 00-21 45	21 00-21 45	21 00-21 45	
12 m	24 89-24 99	24 89-24 99	24 89-24 99	
10 m	28 0-29 7	28 0-29 7	28 0-29 7	

(c)  $\Gamma$ or a station having a control operator who has been granted an operator license of General Class

Wavelength	ITU	ITU	!TU	Sharing
band	Region I	Region 2	Region 3	requirements
	-			See §97 303.
				Paragraph
MΗ	kHz	kHz	kHz	
160 m	1810-1850	1800-2000	1800-2000	(a), (b), (c)
Hf	MHz	MHz	MH/	
80 m	3 525-3 675	3 525-3 675	3 525-3 675	(a)
75 m	3 750-3 800	3 750-4 000	3 750-3 900	(a)
40 m	7 025-7 100	7 025-7 125	7 025-7 100	(a)
-do-	=	7 150-7 300	=	(a)
30 m	10 10-10 15	10 10-10 15	10 10-10 15 (d)	
20 m	14 025-14 150	14 025-14 150	14 025-14 150	
-do	14 225-14 350	14 225-14 350	14.225-14.350	
17 m	18 ()68-18 168	18 068-18 168	18 068-18 168	
15 m	21 025-21 200	21 025-21 200	21 025-21 200	
-do-	21 275-21 45	21 200-21 45	21 275-21 45	
12 m	24 89-24 99	24 89-24 99	24 89-24 99	
10 m	28 0-29 7	28 0-29 7	28 0-29 7	

# (d) For a station having a control operator who has been granted an operator license of Communicator Class

Wavelength	ITU	ITU	HU	Sharing
band	Region 1	Region 2	Region 3	requirements
			•	See §97 303.
				Paragraph
111	MH7	MHz	MHz	
80 m	3 550-3 675	3 550-3 675	3 550-3 675	(a)
75 m	3 750-3 800	3 950-4 000	3 750-3 800	(a)
40 m	7 025-7 050	7 050-7 150	7 025-7 050	(a)
-do-	-	7 250-7 300	-	(a)
15 m	21 050-21 150	21 05-21 15	21 050-21 150	
-do-	21 35-21 45	21 35-21 45	21 35-21 45	
10 m	28 050-28 50	28 05-28 50	28 05-28 50	
-do-		29-29 7		
VHF	MHz	MHz	MHz	
6 m	-	50-54	50-54	(a)
2 m	144-146	144-148	144-148	(a)
1.25 m	-	222-225	-	(a)
UHH.	MHz	MHz	MHz	
70 cm	430-440	430-450	430-450	(a), (b), (f)

\*\*\*\*

# Section 97.305(c) would be modified to read as follows:

Wavelength band	Frequencies Authorized	Emission Types See §97 307(f), paragraph	Standards
MI			
160 m	Entire band	RTTY, data	(3)
-do-	-do-	Phone, image	(1), (2)
I₹E			
80 m	3 500-3 675 MHz	RIIY data	(3)
75 m	3 675-4 000 MHz	Phone, image	(1), (2)
40 m	7 000-7 100 MHz	RIIY, data	(3)
-do-	7 075-7 100 MHz	Phone, image	(1), (2), (9)
-do-	7 100-7 300 MHz	Phone, image	(1), (2)
30 m	Entire band	RTTY, data	(3)
20 m	14 00-14 15 MHz	RTTY, data	(3)
-do-	14 15-14 35 MHz	Phone, image	(1), (2)
17 m	18 068-18 110 MHz	RTTY data	(3)
-do-	18 110-18 168 MHz	Phone, image	(1), (2)
15 m	21 0-21 15 MHz	RTTY, data	(3)
-do-	21 15-21 45 MHz	Phone, image	(1), (2)
12 m	24 89-24 93 MHz	RTTY, data	(3)
-do-	24 93-24 99 MHz	Phone, image	(1), (2)
10 m	28 0-28 3 MHz	RTTY, data	(4)
-do-	28 3-28 5 MHz	Phone, image	(1), (2)
-do-	28 5-29 0 MHz	Phone, image	(1), (2)

-do- VIII <sup>-</sup>	29 0-29 7 MHz	Phone. image	(2)
	50 1-51 0 MHz	RTTY, data	(5)
6 m			
-do-	-do-	MCW, phone, image	(2)
-dı)-	51 0-54 0 MHz	RTTY, data, test	(5), (8)
-do-	-do-	MCW, phone, image	(2)
2 m	144 1-148 0 MHz	RTTY, data, test	(5), (8)
-do-	-do-	MCW, phone, image	(2)
1 25 m	219-220 MHz	Data	(11)
-do-	222-225 MHz	MCW phone, image	
		RT I'Y, data, test	(2), (6), (8)
UHIF		,,,	(-), (-)- (-)
70 cm	Fitting band	MCW phone, image,	
70 Cm	ritine band		(6) (9)
		RTTY, data, SS, test	(6), (8)
33 cm	Entire band	MCW phone, image.	
		RTTY, data, SS, test,	
		pulse	(7), (8), (10)
23 cm	Entire band	MCW phone, image.	
		RTTY, data. SS, test	(7), (8), (10)
13 cm	Entire band	MCW, phone, image.	
		RT IY, data, SS, test,	
		pulse	(7), (8), (10)
SHI		parre	(.), (=), ()
	Entire band	MCW phone, image,	
9 cm	Entire band		
		RTTY, data, SS, test,	(4) (0) (10)
		pulse	(7), (8), (10)
5 cm	Entire band	MCW, phone, image,	
		RTTY, data, SS, test.	
		pulse	(7), (8), (10)
3 cm	Entire band	MCW, phone, image,	
		RTTY, data, SS, test	(7), (8), (10)
1.2 cm	Entire band	MCW, phone, image.	
1 _ CIII	Emire ound	RT ΓY, data, SS, test,	
		pulse	(7), (8), (10)
1.111		puise	(7), (0), (10)
F H L	F 4 1 1	MCW whoma umana	
6 mm	Entire band	MCW, phone, image.	
		RTTY, data, SS, test,	(5) (0) (10)
		pulse	(7), (8), (10)
4 mm	Entire band	MCW, phone, image,	
		RT1Y, data, SS, test,	
		pulse	(7), (8), (10)
2.5 mm	Entire band	MCW, phone, image,	
= / 111111	2	RTTY, data, SS, test,	
		pulse	(7), (8), (10)
7	Entire band	MCW, phone, image.	(-), (-), ()
2 mm	Effictionia	RTTY, data, SS, test,	
			(7) (8) (10)
		pulse	(7), (8), (10)
l mm	Entire band	MCW, phone, image.	
		R11Y, data, SS, test,	
		pulse	(7), (8), (10)
	Above 300 GHz	MCW, phone, image,	
		RΓIY, data. SS, test.	
		pulse (7), (8), (10)	
		F (2 / 1 / 1 / 1 / 1 / 1 / 1 / 1	

Sections 97.307(f)(9) and (10) would be deleted, and subsections (f)(11)-(13) would be renumbered accordingly. Section 97.307(f)(11), which becomes (f)(9), would be modified to read as follows:

\$97 307 Emission Standards

- (a)
- (1)
- (9) Phone and image emissions may be transmitted only by stations located in ITU Regions I and 3, and by stations with control operators holding General Class or Amateur Extra Class operator licenses located within ITU Region 2 that are west of 130° West longitude or south of 20° North latitude

#### Section 97.311 would be modified to add new section 97.311(e):

§97 311 SS emission types

(e) SS transmissions may not be transmitted when the control operator holds a Communicator Class license

#### Section 97.313 would be modified to read as follows:

§97.313 Fransmitter power standards

- (a)
- (c) No station may transmit with a transmitter power exceeding 200 W PEP on the 10.10-10 15 MHz band
- (d) No station may transmit with a transmitter power exceeding 100 W PEP on the 3 55-3 675 MHz, 3 95-4 00 MHz, 7.05-7 150 MHz, 7 25-7 30 MHz, 21 05-21 15 MHz, or 21.35-21 45 MHz segments when the control operator is a Communicator Class operator, and in the bands 3 75-3 80 and 7 025-7 05 when the control operator is a Communicator Class operator in Regions 1 and 3
- (e) No station may transmit with a transmitter power exceeding 50 W PEP on the 28 05-28.5 MHz, 29 0-29 7 MHz, 50-54 MHz, 144-148 MHz, 222-225 MHz, or 430-450 MHz segments when the control operator is a Communicator Class operator
- (1) Stations must transmit using a preassembled, commercially manufactured transmitter or a transmitter constructed from a commercially manufactured kit when the control operator is a Communicator Class operator. Any such transmitter shall meet FCC specifications concerning spurious emissions and harmonic suppression as described elsewhere in these regulations.
- (J) No transmitter used by Communicator Class licensee may incorporate a final amplifier stage that requires more than 30 volts DC

\*\*\*\*

#### Section 97.501 would be modified to read as follows:

§97 501 Qualifying for an amateur operator license.

- (a) Fach applicant must pass an examination for a new amateur operator license grant and for each change in operator class. Each applicant for the class of operator license grant specified below must pass, or otherwise receive examination credit for, the following examination elements
- (1) Amateur Extra Class operator Elements 2, 3, and 4;
- (2) General Class operator Elements 2 and 3,
- (3) Communicator Class operator Element 2
- (b) As part of the application process, Communicator Class applicants are required to obtain and read the current FCC Part 97 rules and to certify their understanding. They further must have a permanent copy of the rules at the control operator location and agree to abide by these regulations

# Section 97.503(a) would be deleted and section 97.503(b) redesignated section 97.503(a) and modified to read as follows:

§97 503 - Element standards.

- (a) A written examination must be such as to prove that the examinee possesses the operational and technical qualifications required to perform properly the duties of an amateur service licensee. Each written examination must be composed of a question set as follows
- (1) Element 2 20 questions concerning the privileges of a Communicator Class operator license. The minimum passing score is 15 questions answered correctly.
- (2) Element 3 35 questions concerning the privileges of a General Class operator license. The minimum passing score is 26 questions answered correctly
- (3) Element 4 50 questions concerning the privileges of an Amateur Extra Class operator license. The minimum passing score is 37 questions answered correctly.

#### Section 97.505 would be modified to read as follows:

897 505 Element eredit

- (a) The administering VEs must give credit as specified below to an examinee holding any of the following license grants or license documents
- (1) An unexpired (or expired but within the grace period for renewal) FCC-granted Advanced Class operator license grant. Elements 2, 3 and 4.
- (2) An unexpired (or expired but within the grace period for renewal) FCC-granted General Class operator license grant issued prior to [effective date]. Elements 2 and 3
- (3) An unexpired (or expired but within the grace period for renewal) FCC-granted Technician or Technician Plus Class operator license grant. Elements 2 and 3.
- (4) An unexpired (or expired but within the grace period for renewal) FCC-granted Novice Class operator license grant issued prior to [effective date] Element 2.
- (5) A CSCE: Each element the CSCE indicates the examinee passed within the previous 365 days
- (b) No examination credit, except as herein provided, shall be allowed on the basis of holding or having held any other license grant or document.

#### Section 97.507(a) and (c) would be modified to read as follows:

§97 507 Preparing an examination

(a) Each written question set administered to an examinee must be prepared by a VE holding an Amateur Extra Class operator license. A written question set may also be prepared for elements 2 and 3 by a VE holding a General Class operator license.

(b)

(c) Each written question set administered to an examinee for an amateur operator license must be prepared, or obtained from a supplier, by the administering VEs according to instructions from the coordinating VEC

Section 97.507(d) would be deleted.

\*\*\*\*

#### Section 97.509(b) would be modified to read as follows:

§97 509 Administering VE requirements

(a)

(b) Each administering VE must

- (1) Be accredited by the coordinating VEC,
- (2) Be at least 18 years of age,
- (3) Be a person who holds an amateur operator license of the class specified below:
- (1) Amateur Extra or General Class in order to administer a Communicator Class operator license examination,
- (ii) Amateur Extra Class in order to administer an Amateur Extra Class or General Class operator license examination

Section 97.509(g) would be deleted, and sections 97.509(h) to 97.509(m) would be redesignated §97.509(g) to §97.509(l)